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TECHNO-COMMERCIAL LEADERSHIP DEVELOPMENT DATABASE

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SCHOOL OF COMPUTING
COLLEGE OF ARTS AND SCIENCES

TECHNO-COMMERCIAL LEADERSHIP DEVELOPMENT DATABASE

**PETROLIAM NASIONAL BERHAD (PETRONAS)
WILAYAH PERSEKUTUAN KUALA LUMPUR**

This report is prepared to fulfil the requirement of

STIX3912 Practicum

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STIX3912 PRACTICUM

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EXECUTIVE SUMMARY

Techno-Commercial Leadership Development (TCLD) is a database that could help organizations to track on the progress of the candidates that involved in the program from the start until the end of the program. The aim of the database is for recording and storing as it will very helpful for TTM staff to verify their status and analyses straight through the excel database. Furthermore, the enhanced TCLD database aims to simplify and automate the data inputs during data gathering and to provide a clearer and practical data output via the database dashboard. With the dashboard it will be able to provide the user to visualize the information clearly. All the data stored before are incomplete and being maintain irregularly, so with the enhanced version few data information has been added up for future use. Therefore, the TCLD database will be very helpful because the information stored will make them ease in analyze the candidate's status and data from the nominations until the final stage. There are four objectives for this project, which is to identify the requirements needed to improve the database system for the user, to design the database to have the user usability and functionality, to develop the usability and functionality of TCLD database and to test the usability of TCLD database within the user in the company. The methodology that has been chosen is System Prototyping for the provide phases that fit with the project requirement. This methodology has four phases which is planning, analysis, design, and implementation. The first phase is planning which requires production of a proposal with collected some requirement. The second phase is analyzing requirements that needed in this project. For example, identifying requirements and collecting data through an experience from the TTM staff. The third phases are where all requirement will be turned into the design and refinement to meet the development process. Next phases are implementation phase where the database take place to be used and testing to reach the target users to use the database. Lastly, complete for the final presentation, system demo and final report will be submitted.

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ABBREVIATION

DCDW	Development Center Development Workshop
KLCC	Kuala Lumpur City Center
TTM	Top Talent Management
TCLD	Techno-Commercial Leadership Development
UUM	Universiti Utara Malaysia

CHAPTER 1

INTRODUCTION

This chapter gives an introduction about the organization, where the industrial training has taken place. This chapter presents an organizational background, history, structure, function, vision, and mission as well as the organization activities.

1.1 Organization Background

Petroliam Nasional Berhad (PETRONAS) is a global energy and solutions company, ranked amongst the largest corporations on Fortune Global 500®.

Seek opportunities in energy investments both in hydrocarbon and renewables across the globe and maximize value through our integrated business model. Our portfolio includes conventional and unconventional resources as well as a diverse range of fuel lubricant, and petrochemical products. This is further strengthened with a successful product delivery track record. Customers are at the heart of everything that we do, and our businesses are anchored on meeting their needs.

Technology is the differentiator and the key to ensuring excellence in all that we offer – energy, products, and solutions, as well as unlocking new business frontiers. Sustainability is at the core of everything that we do, as we believe in harnessing the good in energy to add quality to everyday lives. People are our strength and partners for growth. We believe in progressing with our partners in addressing the evolving needs in today's changing energy landscape. Figure 1.1 below shows the Petronas Twin Tower.



Figure 1.1 Petronas Twin Tower

Narrow down to the Top Talent Management division focused on equipping top talent with the necessary leadership behaviors and skills required by PETRONAS for sustainability of business growth. Effective leadership competencies will promote high performance of top talents contributing to the strategy of the Right Leader, Right Talent and Right Environment. The intent is to build leadership bench strength aligned to the top talent leadership clusters that supports succession planning for critical leadership roles within the organization.

1.1.1 Organization History and Structure

Petronas is an acronym for Petroliam Nasional Berhad. It was established in 17 August 1974 as the national oil company for Malaysia. Petronas which is wholly owned by the government it is the corporation which is vested with the entire oil and gas resources in Malaysia and is entrusted with the responsibility of developing and adding value to these resources. Petronas has grown from just being the manager or the regulator of Malaysia's upstream sector into a fully integrated oil and gas production. PETRONAS have been ranked among the FORTUNE Global 500® the largest corporations in the world. Since it was invested PETRONAS has grown to be an international oil and gas company with business interests in 31 countries. As of the end of March 2005, the Petronas Group comprised 103 wholly owned subsidiaries, 19 partly owned outfits and 57 associated companies. Together, these companies make the Petronas Group, which is involved in various oil and gas-based activities. Figure 1.2 below shows the Organizational Structure of PETRONAS.

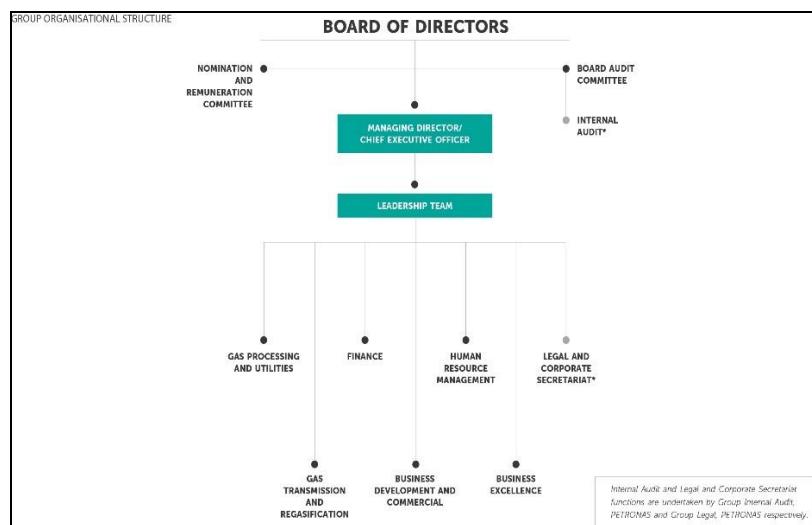


Figure 1.2: Organizational Structure of PETRONAS

1.1.2 Vision/Mission

Mission and Vision statements are combined to provide a statement of the company's purposes, goals, and values. It helps to keep employees inspired to work more productively by providing focus and common goals.

Vision

PETRONAS aim is to be a leading gas infrastructure and utilities company.

Mission

The mission of the company is listed. Below is the mission of the company:

- PETRONAS are a business entity.
- Gas infrastructure and utilities is the core business.
- PETRONAS aims to operate safely, reliably and competitively.
- Optimize the gas value chain to maximize returns for the stakeholder.

1.2 Organization Activities

The Group is engaged in a wide spectrum of petroleum activities, including upstream exploration and production of oil and gas to downstream oil refining; marketing and distribution of petroleum products; trading, gas processing and liquefaction, gas transmission pipeline network operations, marketing of liquefied natural gas, petrochemical manufacturing and marketing, shipping, automotive engineering and property investment. PETRONAS is doing its business with the major strategy of integration, adding value and globalization. Their major facets of business integration are Exploration and Production, Oil, Gas, Petrochemicals, Logistics and Maritime, Research and Technology and Corporate Sustainability.

1.3 Chapter 1 Summary

This chapter has explained about Petroliam Nasional Berhad (PETRONAS). However, the structure of PETRONAS is first presented, followed by the explanation about history, vision and mission of PETRONAS also presented. Besides, some activities conducted by PETRONAS during the practicum are also included.

CHAPTER 2

PROJECT DESCRIPTION

This chapter provides project description about the system. The chapter presents project background, problem statement, project objective, project scope, significance of project, the weakness and recommendation for improving the system.

2.1 Project Background

The main objective to develop Techno Commercial Leadership Development (TCLD) database is to record relevant information and data of the TCLD candidates for ease of reference. TCLD database holds every candidate data and progress during and after their journey in the program. It contains their profile information, current position and their assessment marks for Mock GMAT, Talent Q, Video and Essay. To keep track of their journey in this program, the status and remarks will be updated as the results of every candidates obtained.

As of now, the database only stores the basic information data of the candidates and moving forward, the database can be further enhanced by creating a simple dashboard to provide a big picture on the overall TCLD's candidates demographic in order to understand TCLD's candidates better.

In addition to that, the enhanced TCLD database will be able to simplify the data output to ensure fields like candidate's position title, salary grade, etc are standardized and streamlined with the information downloaded from PETRONAS overall staff database.

2.2 Problem Statement

Currently, TCLD database is maintained irregularly. Moreover, the current database does not contain a complete information for the user to record and store the details regarding the program. Furthermore, the database also is not in organize way to analyze the data easily. Currently, the data are mixing up and outdated. Therefore, it needs an enhancement to check back the data recorded and make an update of it. As such, moving forward, the enhanced TCLD database aims to simplify and automate the data inputs during data gathering and to provide a clearer and practical data output via the database dashboard. With the dashboard it will be able to provide the user to visualize the information clearly.

Apart from that, as of now the overall data is inserted manually (column by column). With the availability of the enhanced database, user will be able to key in the staff number in the output database and it will be streamlined to make it more efficient, consistent, and accurate reporting.

2.3 Project Objective

The main objective of this project is to enhance the current TCLD database. Below are the subobjectives of the project:

- a) To identify the requirements needed to improve the database system for the user.
- b) To restructured the database to have the .
- c) To create the main dashboard and data of TCLD database.
- d) To test the usability of TCLD database within the user in the company.

2.4 Project Scope

The users of the database will be within the Human Resources (HR) Staff in Petronas only. This database has been developed to help the Human Resources (HR) staff in storing, searching and updating the data. The database needs some enhancement in order to be more organize and efficient in storing data.

2.5 Significance of Project

The database enhancement project will be able to provide the users in the company to manage the data in efficient ways. In addition to that, it will make the process of storing and updating become easier and simpler. Currently, the database is managed manually which could possibly resulted to inconsistency in data entry, room for errors, mis-keying information.

By enhancing the database, it will be able to incorporate new updates and information and by doing this it will be able to improve data accuracy.

2.6 Weaknesses and Recommendation

The weakness and recommendation of TCLD Database shown as below:

Weakness:

- a) This TCLD Database does not automatically update the data.

Recommendation:

- a) Add functionality to update the data automatically.

2.7 Chapter 2 Summary

This chapter has been discussed about the project description. In chapter 2 clearly explained about the project background, project problem statement, project objective, project scope, significance of project, the weakness and recommendation for improving the system. This project is focusing to record data of TCLD candidate's information and their status of the program. This will help the user easier to search and track the status and the result of the candidates efficiently through the database.

CHAPTER 3

METHODOLOGY

This chapter provides a project methodology that is used when developing the TCLD database. This chapter discusses in detail the overall phases and description of each phases based on methodology selected. To develop Techno Commercial Leadership Development, System Prototyping method has been chosen.

3.1 Overall Phases

This chapter provides a project methodology that is used when upgrading the TCLD Database. This chapter discusses in detail the overall phases and description of each phases based on methodology selected. To upgrade the TCLD Database, System Prototyping method has been chosen.

This System Prototyping methodology is suitable for the project because it has short time schedule to complete the project. The methodology gives clear steps on developing the project. This system prototyping has 4 phase which are planning phases, analysis phases, design phases and implementation phases. Figure 3.1 below shows the System Prototyping methodology used in developing the database.

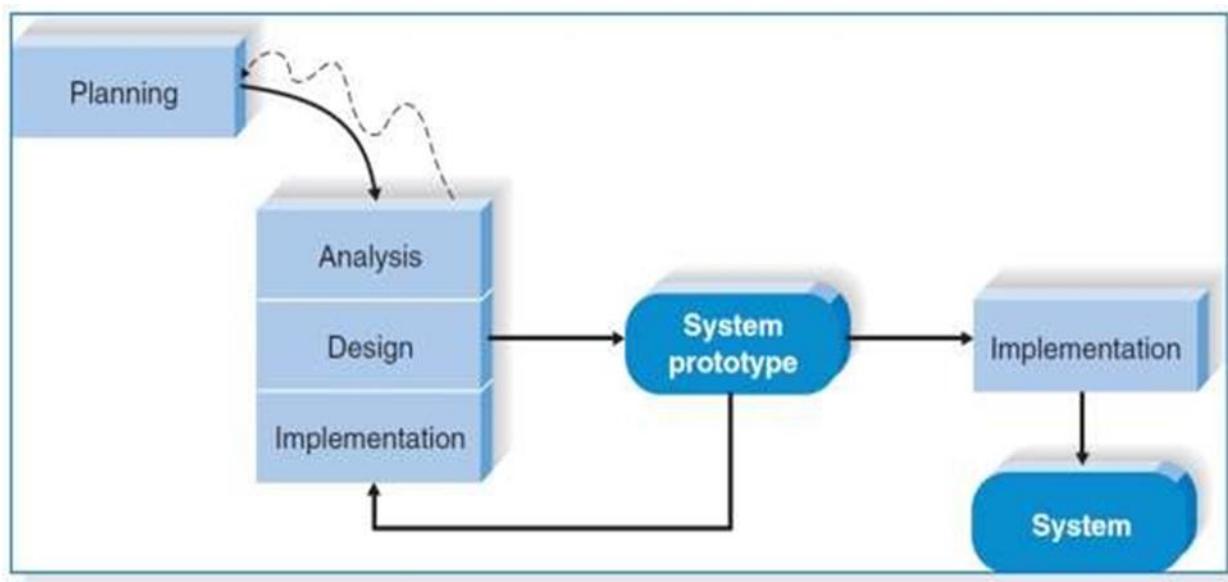


Figure 3.1: The Project Methodology (Dennis, et al., 2012, p.55).

3.2 Description of Each Phase

The System Prototyping method is discussed in detail based on each phase such as planning, analysis, design, and implementation phase.

Phase 1: Planning

The first phase is planning where the developer has discussed with the organization supervisor Miss Ajlaa Ali Mansor and the manager of the division Mr Zainul Abidin involved to enhance the TCLD database for the organization. The discussion is held through online meeting on Microsoft Teams. After an explanation in details on how the database work from the supervisor, Miss Ajlaa handed me the database through Microsoft Teams. The figure can be referred in appendix B figure 4. A problem was identified in the current TCLD database system in the company where users find the database are unorganized and difficult to key in. Moreover, the database needs to be added with a dashboard to visualize the data clearly and easily for the user. With the dashboard, user can monitor the data easily without have to go through the whole data and analyze. Furthermore, the data also needs to be updated to the latest information of the candidates. The data must be updated frequently for the user to track them time by time when needed. Next, there are also an additional tab for the renomination candidates from previous batch. The new requirement of the TCLD nomination candidate is the candidate can only be nominated two times. At this stage, a plan is proposed to develop an upgraded database that can assists the user to store the details accordingly in easier ways. A project proposal is drafted explaining the problems happens in the TCLD database, the objective of the project, the significant of the project, the scope of the project and the schedule of the project.

Phase 2: Analysis

The second phase is analyzing requirements that needed in this project. For example, identifying requirements and collecting data through an informal interview with the users. This phase also involved activities in exploring the resources or tools needed for use in this project. In this phase, the enhancement of the database project is discussed in detail such as the features required to make the database more efficient in storing and analyzing data in the future. The requirement of the TCLD Database will be analyzed by conducting a requirements analysis process. The activities involved in this phase are identifying the problem and the solutions that needs to be taken. The requirement will be gathered by interviewing the current users in the company. Before proceeding to the design phase, the design or the sketches of the user interfaces will also be produced at this stage. The sketches of the designed database can be referred when designing the project to avoid major mistakes.

Phase 3: Design

This phase has begun by drafting the specification of the software into a design plan that called design specifications. The sketches start by referring the important content of the old database. The old database also can be referred in appendix b. At the end of this phase, design deliverable of the project has been produced including the entity relationship diagram. The entity relationship diagram can be referred in appendix B figure 5. The tools that has been used in designing the diagram is Visual Paradigm software which is the simplest and suitable tools to design graphical model. In designing the new look of TCLD database, the dashboard also needs to be designed in clearer way to visualize the data recorded. With the dashboard, it helped the user to see the whole summarized of the data recorded in the database easily. Furthermore, the database needs to add up with data entry form for the user to record, store and update the details and information of the staff easily. A few tabs of the database have been added up to separate the data accordingly to make it more organize and understandable. It has been separated from the first batch 1/2011 to 9/2019 and the latest batch 10/2020. Batch of 10/2020 are still on going so it needs to be separated in different tab to make it easier to track and see their progress during the TCLD journey. Next, the tab for resigned candidates are also has been added up to separate the candidates from who are still working. Next, the data the design and interface of the database can be referred from figure 3.2 to figure 3.14.

Phase 4: Implementation

In implementation stage it begins when all the functions are done and tested to the user whether it meets the users need or not. In this stage, user will navigate around the database for the new features and the new system of the database. Implementation phase is to follow the plan that has been put together and handle any problems that come up after the testing part. Implementation begins when I hand in the latest and complete version of the new enhanced database for the staff to test through online meeting. All the requirement and features needed in the enhancement database has been fulfilled but need some minor amendment of the data after the feedback session from the user. Other than that, the users are satisfied with the result that has being study. The system will finally be implemented, and the users can use a whole working database. The users can inform the developer if there is any bug or error that may occur and need to be fixed during this implementation phase.

Old Database Model

Figure 3.2 to figure 3.4 shows the old database before the enhancement project.

The screenshot shows a Microsoft Excel spreadsheet titled "TCLD Master DB_asof20201015.olddummy". The data is presented in a pivot table format:

	Count of Staff No
PD&T	12
Excluded from VP Interview	5
Not Recommended	3
Recommended	4
Corporate	5
Excluded from VP Interview	2
Recommended	3
Downstream Business	11
Excluded from VP Interview	6
Not Recommended	2
Recommended	3
Upstream Business	40
Excluded from VP Interview	34
Not Recommended	4
Recommended	2
Grand Total	68

The "Row Labels" dropdown is set to "Count of Staff No". The "Filter" dropdown is set to "Classifier Label". The "Sort & Filter" dropdown is set to "Sort & Filter & Select". The "PivotTable" tab is selected in the ribbon.

Figure 3.2: Quick pivot tab from the old database to analyze the data

The screenshot shows a Microsoft Excel spreadsheet titled "TCLD Master DB_asof20201015.olddummy". The data is presented in a table format:

Staff No	Employee Name	Business	Interest to pursue TCLD?	Talent Q	Talent Q Groupings	Mock GMAT MAT Groupin	Overall Status	Result from VP
129530	Adam bin Ahmad	Corporate	Other Reason	0	0	0	0	Not Eligible
137575	Adam bin Ahmad	Corporate	Accepted	87	85 and above scores	780	More than 600	Qualified for VP Interview
1002797	Adam bin Ahmad	Downstream Business	Accepted	87	85 and above scores	640	More than 600	Qualified for VP Interview

The table has a header row and three data rows. The columns are labeled: Staff No, Employee Name, Business, Interest to pursue TCLD?, Talent Q, Talent Q Groupings, Mock GMAT MAT Groupin, Overall Status, and Result from VP. The "Quick Pivot" tab is selected in the ribbon.

Figure 3.3: Batch 10 main database from the old database

The screenshot shows a Microsoft Excel spreadsheet titled "TCLD Master DB_asof20201015_olddummy - Microsoft Excel". The table structure is as follows:

Start No.	Employee Name	Gender	TCLD Intake	Age (As at Nomination)	Category	Position (Upon Nomination)
1						
2	122556 Adam bin Ahmad		10/2020			
3	130143 Adam bin Ahmad		10/2020			
4	122163 Adam bin Ahmad		10/2020			
5	130366 Adam bin Ahmad		10/2020			
6	132018 Adam bin Ahmad		10/2020			
7	134399 Adam bin Ahmad		10/2020	33	BT	Head (Resource Devt # SUM/KZ), Petroleum Engineering, PCSB, Upstream
8	122475 Adam bin Ahmad		8/2018	36	BT	Manager (Mechanical & Rotary), Maintenance, PETRONAS Fertilizer Kedah Sdn Bhd, Downstream Business
9	122440 Adam bin Ahmad		8/2018	36	CT	Head (Maintenance & Reliability), Operations, Iraq, International Assets, Development & Production, PETRONAS Carigali Sdn Bhd, Upstream Business
10	122440 Adam bin Ahmad		8/2018	33	CT	Manager (OIM- BO/EM/LA), Sarawak Oil, PCSB, Upstream
11	88425 Adam bin Ahmad		2017	38		
12	88438 Adam bin Ahmad		2017	38		Manager (Production Shift), PPTJ5B
13	114307 Adam bin Ahmad		2017	38		Manager (Process Safety), PC Ethylene, PCGB Group
14	116920 Adam bin Ahmad		2017	32		Manager (Operation Governance), MRCSB
15	117093 Adam bin Ahmad		2017	38		Manager (Health, Safety & Environment)
16	117434 Adam bin Ahmad		2017	38		
17	117446 Adam bin Ahmad		2017	36		
18	117795 Adam bin Ahmad		2017	38		Manager (Planning), MRCSB
19	117909 Adam bin Ahmad		2017	38		
20	120965 Adam bin Ahmad		2017	37		
21	121203 Adam bin Ahmad		2017	36		Manager (Business Planning & Services), Enterprise Optimisation, DCO
22	121930 Adam bin Ahmad		2017	35		Executive (Product Development)
23	122222 Adam bin Ahmad		2017	38		Head (Labuan Fuel), PDB Group
24	122233 Adam bin Ahmad		2017	37		Head (Field Instrument & Control System)
25	122343 Adam bin Ahmad		2017	38		Manager (Production Services), PC Methanol, PCGB
26	122481 Adam bin Ahmad		2017	37		
27	134833 Adam bin Ahmad		2017	37		

Figure 3.4: Whole tracking data of the database from all batches of the program

New Database Model

Dashboard of TCLD Database tab

Figure 3.5 and figure 3.6 shows the dashboard of the TCLD database where it shows the visualization of the data in the database.

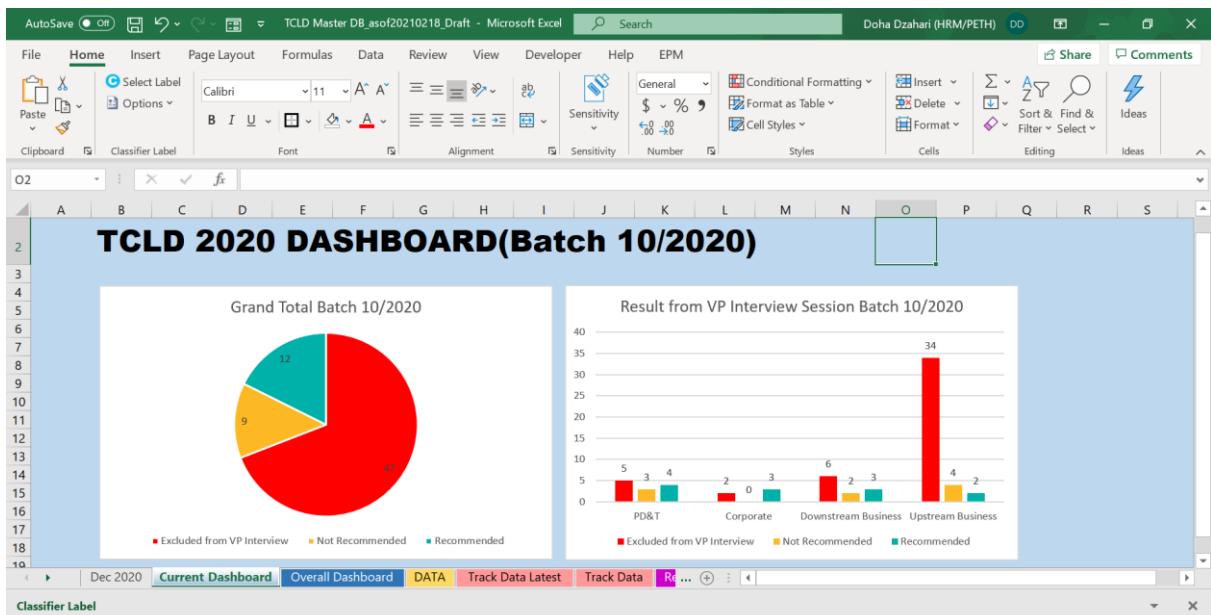


Figure 3.5: Current Dashboard of TCLD Database

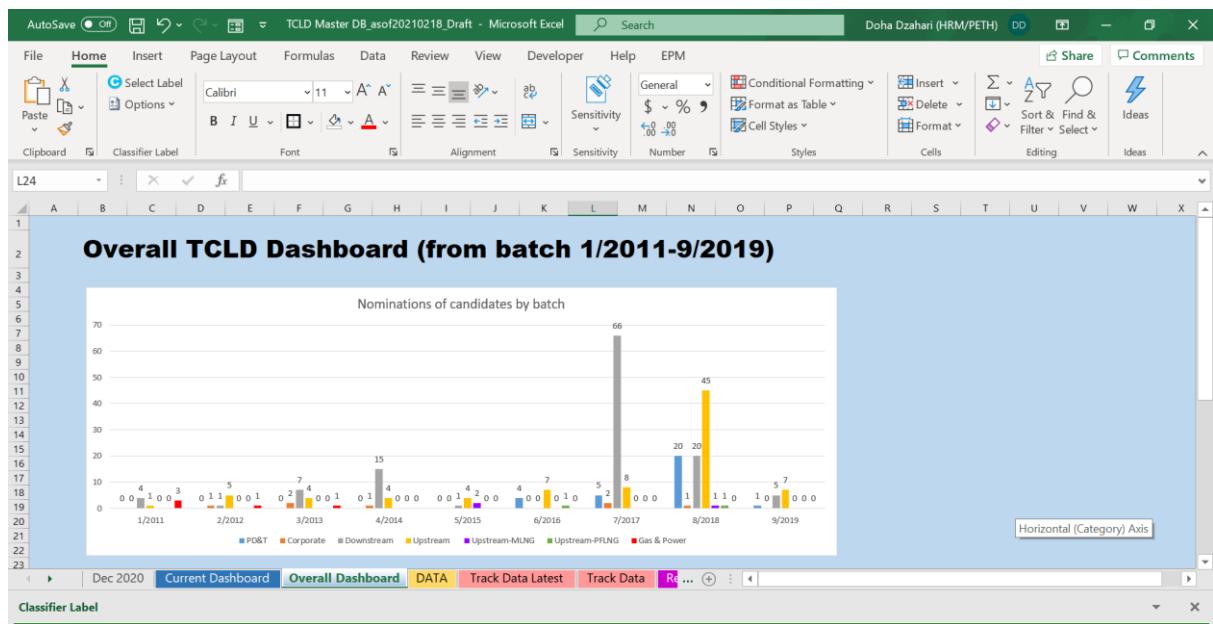
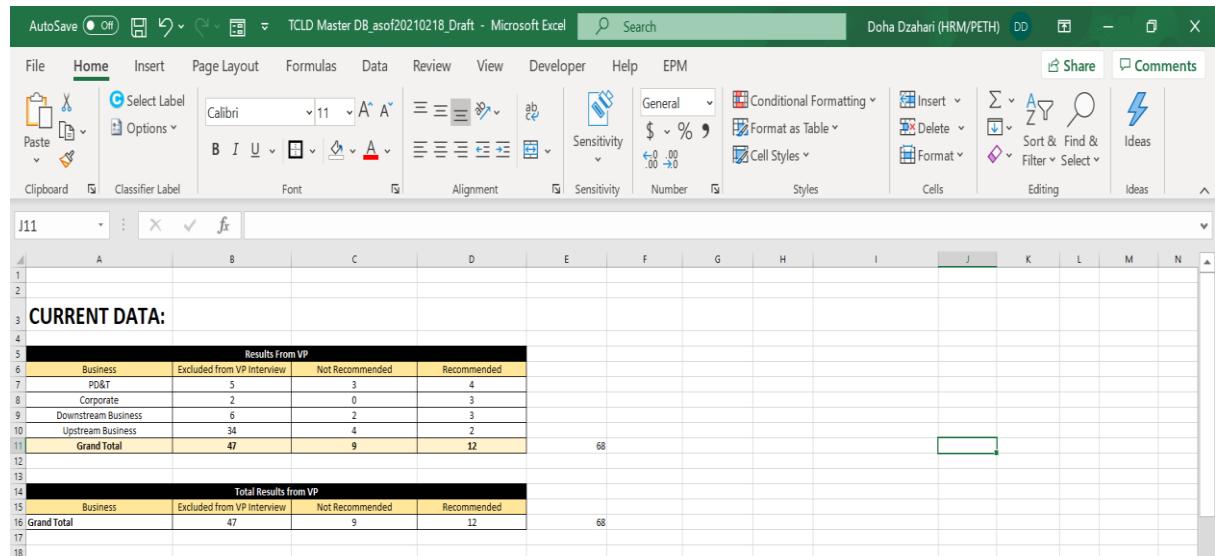


Figure 3.6: Overall Dashboard of TCLD Database

Data Tracking and Summarization tab

Figure 3.7 and figure 3.8 shows the summarization of the data to be reflected in the dashboard.

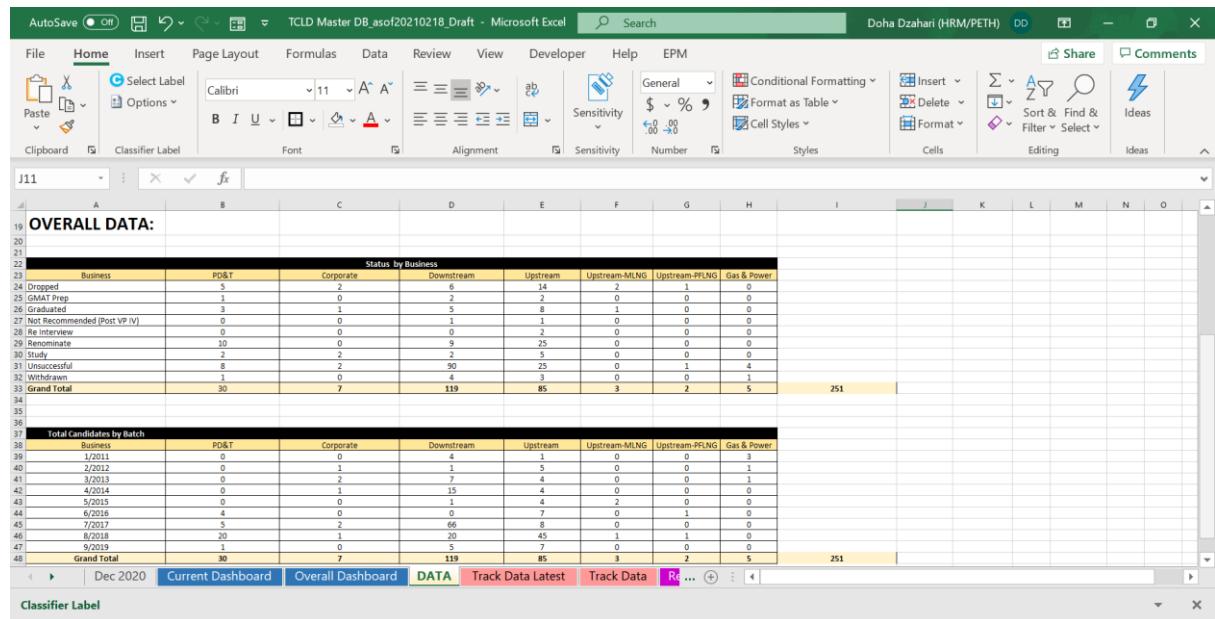


The screenshot shows a Microsoft Excel spreadsheet titled "TCLD Master DB_asof20210218.Draft - Microsoft Excel". The ribbon is visible at the top with tabs like File, Home, Insert, Page Layout, Formulas, Data, Review, View, Developer, Help, and EPM. The Home tab is selected. The spreadsheet contains two tables under the heading "CURRENT DATA:".

Results From VP			
Business	Excluded from VP Interview	Not Recommended	Recommended
PD&T	5	3	4
Corporate	2	0	3
Downstream Business	6	2	3
Upstream Business	34	4	2
Grand Total	47	9	12

Total Results from VP			
Business	Excluded from VP Interview	Not Recommended	Recommended
Grand Total	47	9	12

Figure 3.7: Summarization data of the current batch



The screenshot shows a Microsoft Excel spreadsheet titled "TCLD Master DB_asof20210218.Draft - Microsoft Excel". The ribbon is visible at the top with tabs like File, Home, Insert, Page Layout, Formulas, Data, Review, View, Developer, Help, and EPM. The Home tab is selected. The spreadsheet contains two tables under the heading "OVERALL DATA:".

Status by Business							
Business	PD&T	Corporate	Downstream	Upstream	Upstream-MLNG	Upstream-PFLNG	Gas & Power
Dropout	5	2	14	2	0	0	0
Graduate	0	0	2	2	0	0	0
Not Recommended (Post VP IV)	3	1	5	8	1	0	0
Re Interview	0	0	0	1	0	0	0
Remainate	10	0	9	25	0	0	0
Drop	2	2	3	5	0	0	0
Unsuccessful	8	2	90	25	0	1	4
Withdrawn	3	0	4	3	0	0	1
Grand Total	30	7	119	85	3	2	5

Total Candidates by Batch							
Business	PD&T	Corporate	Downstream	Upstream	Upstream-MLNG	Upstream-PFLNG	Gas & Power
1/2011	0	0	4	1	0	0	3
2/2012	0	1	1	5	0	0	1
3/2013	0	2	7	4	0	0	1
4/2014	0	1	15	4	0	0	0
5/2015	0	0	1	4	2	0	0
6/2016	4	0	0	7	0	1	0
7/2017	5	2	66	8	0	0	0
8/2018	20	1	20	45	1	1	0
9/2019	1	0	5	7	0	0	0
Grand Total	30	7	119	85	3	2	5

Figure 3.8: Summarization data of the overall batch

Data of the Candidates that has been nominated in the TCLD Program

Figure 3.9 shows the data of the candidates that has been nominated for TCLD Program from Batch 1/2011 to batch 19/2019. It contains 251 candidates.

Figure 3.9: Data of the candidates for the whole nominations from batch 1/2011 to 9/2019

Renomination Candidates tab

Figure 3.10 shows the data of the renomination candidates from previous batch. It will be recorded in a different tab to track them for maximum to two nominations only.

Figure 3.10: Data of the renominate candidates

TCLD Status Tab

Figure 3.11 shows the listed status for the candidates in the database.

TCLD Status														
Renominate														
GMAT Prep														
Withdrawn														
Unsuccessful														
Dropped														
Not Eligible														
Not Qualified for VP Interview														
Qualified for VP IV														
Not Recommended (Post VP IV)														
Reinterview														
Study														
Graduated														

Figure 3.11: Shows the status of the candidates for TCLD program

Talent Review Tab

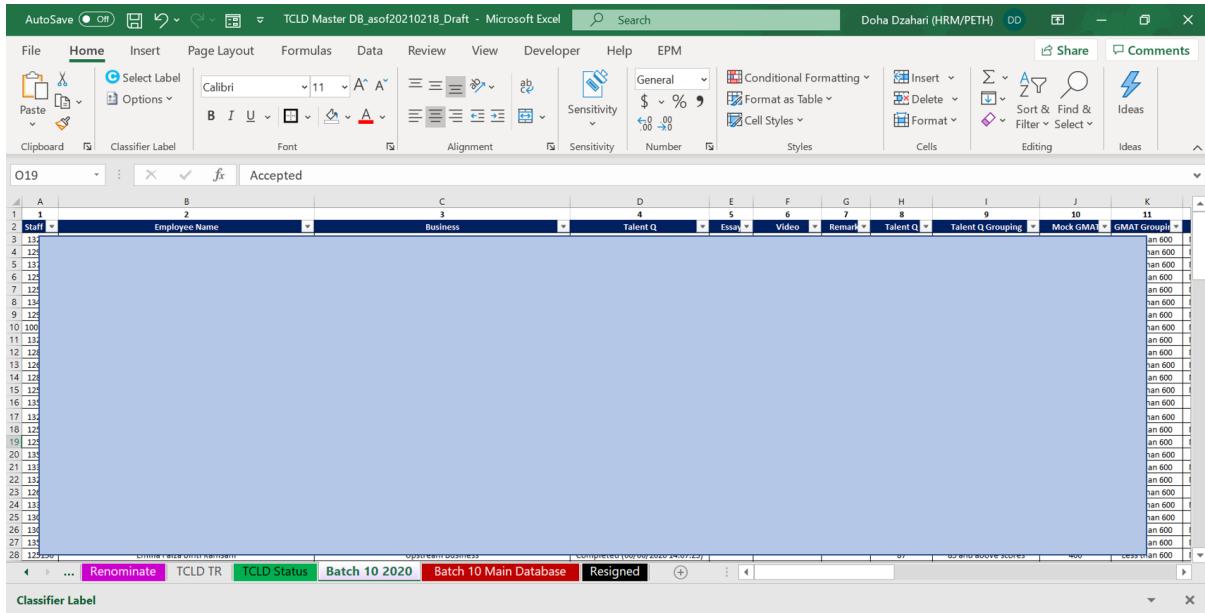
Figure 3.12 shows the list of candidates who have graduated. In this tab, traffic light system were used to identify their duration for their position. For green it is indicate for the duration between 1-24 months, yellow for 25-35 months and red for 36 months above of working duration.

Talent Review														
Staff No	Staff Name	Position	SG	JG	Years in SG	Years in OPLU/Company	Years in Position	VIP(Month)	Indicator					
11														
13														
15														
11														
12														
12														
11														
11														
13														

Figure 3.12: Traffic light system for candidates who have graduated

Batch 10/2020 tab

Figure 3.13 shows the data for the latest batch of the TCLD program. Since this Batch 10/2020 is still in progress, they require a different tab to update their progress accordingly.

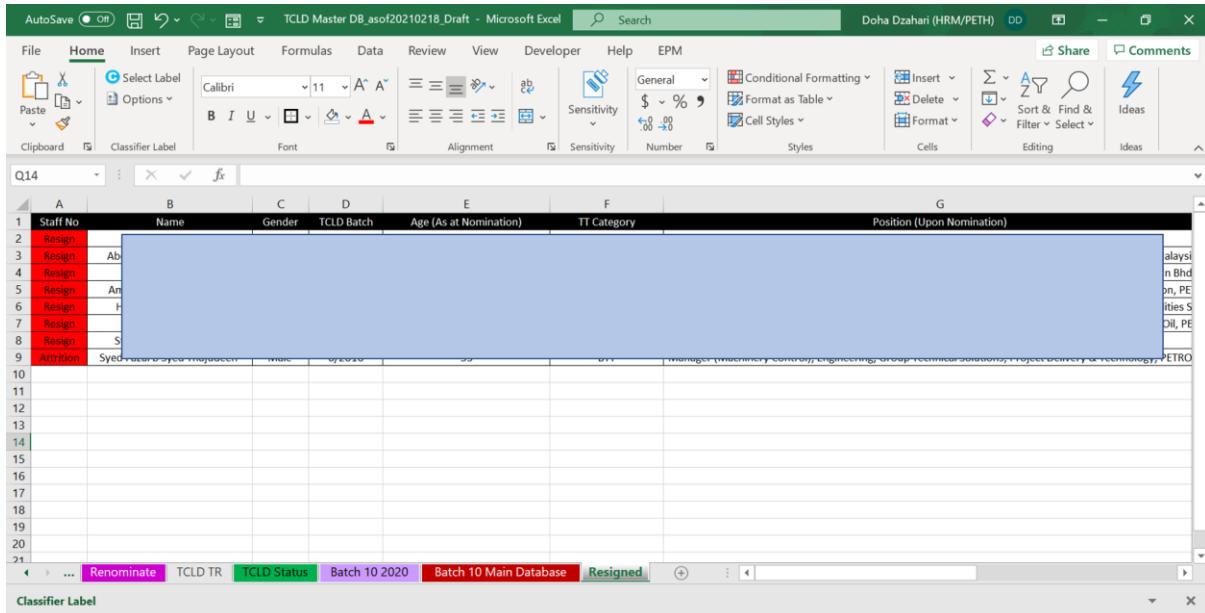


The screenshot shows a Microsoft Excel spreadsheet titled "TCLD Master DB_asof20210218_Draft - Microsoft Excel". The "Home" tab is selected. The data is organized into columns labeled A through K. Column A contains staff numbers (1 to 28). Column B is labeled "Employee Name" and lists names such as "Abdul", "Anita", "Hilmi", "Siti", and "Azizah". Column C is labeled "Business" and lists "Talent Q", "Essay", "Video", "Remark", "Talent Q", "Mock GMAT", and "GMAT Group". Columns D through K contain numerical values ranging from 0.00 to 1000. The bottom tabs show "Renominate", "TCLD TR", "TCLD Status", "Batch 10 2020", "Batch 10 Main Database", and "Resigned".

Figure 3.13: Candidates data for Batch 10/2020

Resigned Tab

Figure 3.14 shows the data of resigned candidate during their journey in TCLD. For a record they will be define in another tab for resigned tag.



The screenshot shows a Microsoft Excel spreadsheet titled "TCLD Master DB_asof20210218_Draft - Microsoft Excel". The "Home" tab is selected. The data is organized into columns labeled A through G. Column A is labeled "Staff No" and contains "Resign" entries. Column B is labeled "Name" and lists names such as "Abdul", "Anita", "Hilmi", "Siti", and "Azizah". Column C is labeled "Gender". Column D is labeled "TCLD Batch". Column E is labeled "Age (As at Nomination)". Column F is labeled "TT Category". Column G is labeled "Position (Upon Nomination)" and lists "alaysia Bhd", "n, PE", "ties S", "Oil, PE", and "ETRO". The bottom tabs show "Renominate", "TCLD TR", "TCLD Status", "Batch 10 2020", "Batch 10 Main Database", and "Resigned".

Figure 3.14: Data of resigned candidates throughout the TCLD journey

3.3 Chapter 3 summary

This chapter discusses about the methodology that has been used for Techno Commercial Leadership Development. Methodology is a path that how to build up a system more efficiently and systematically while testing the system. The methodology has been used for this system is system prototyping method. This methodology contains four phases which is planning, analysis, design, and implementation. All phases have been discussed clearly above.

CHAPTER 4

CONCLUSION

Petroliam Nasional Berhad is an organization where I have presented my industry training for six months from 19th October 2020 to 19th April 2021. I have been given the task of enhancing a database that will be used to record and track the candidate of TCLD. TCLD Database enables TTM staff to record and track their status and results through the database directly.

This database has been successfully enhanced and will be used by the TTM staff at Petroliam Nasional Berhad. Next, the database is focusing on recording and tracking the nominated candidates for TCLD program to pursue their MBA. The TCLD Database able to helps TTM staff to record and track data easily and quickly.

To enhance this TCLD Database, I have used System Prototyping methods. There are four phases in System Prototyping methodology and all of these phases are very helpful for me to enhance the database smoothly. To ensure that this project meets its objectives and requirements, I have conducted a testing and evaluation session with potential user which is the TTM staff at Petroliam Nasional Berhad.

However, this database looking very helpful from the responses of TTM staff. The database needs to be maintained regularly and improved in the future by updating the results and adding more functions such as updating automatically based on the results.

REFERENCES

Alan Dennis, Barbara Wixom, Roberta M. Roth, “System Analysis and design”, 5th edition, John Wiley & Sons, 2012.

APPENDIX A

Other Assignment in the Organization

List of Task

There are many tasks that conducted by me during practicum period. Below is task that I do:

1. Manage on DCDW (Development Center & Development Workshop) Database.

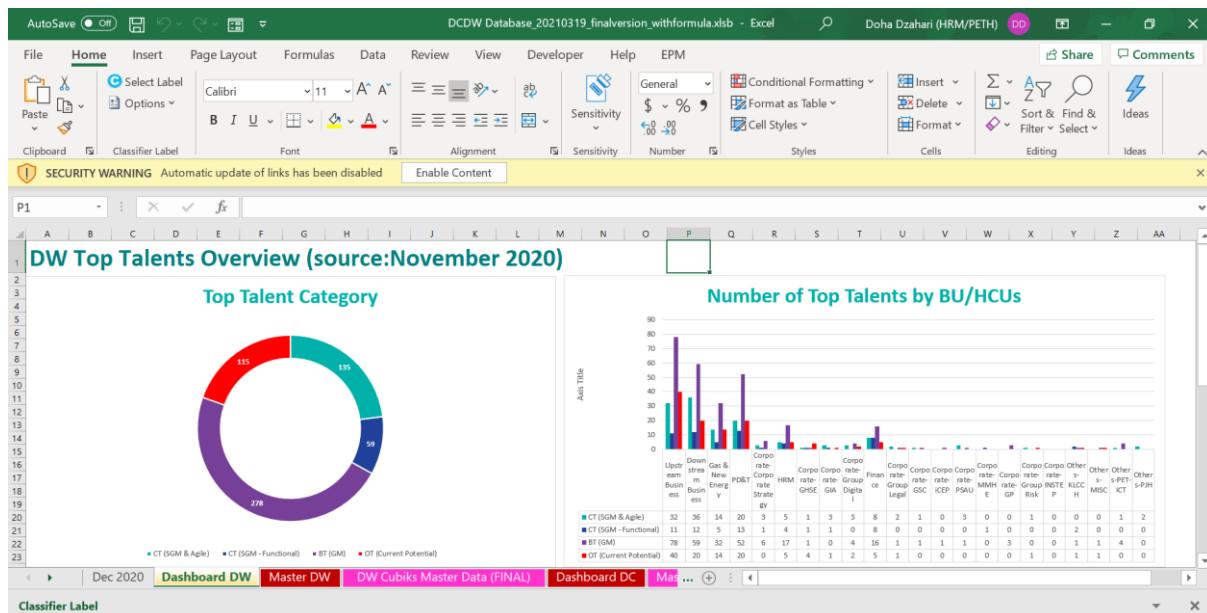


Figure 4: Dashboard of Development Centre Development Workshop Database

2. Manage on POA Database.

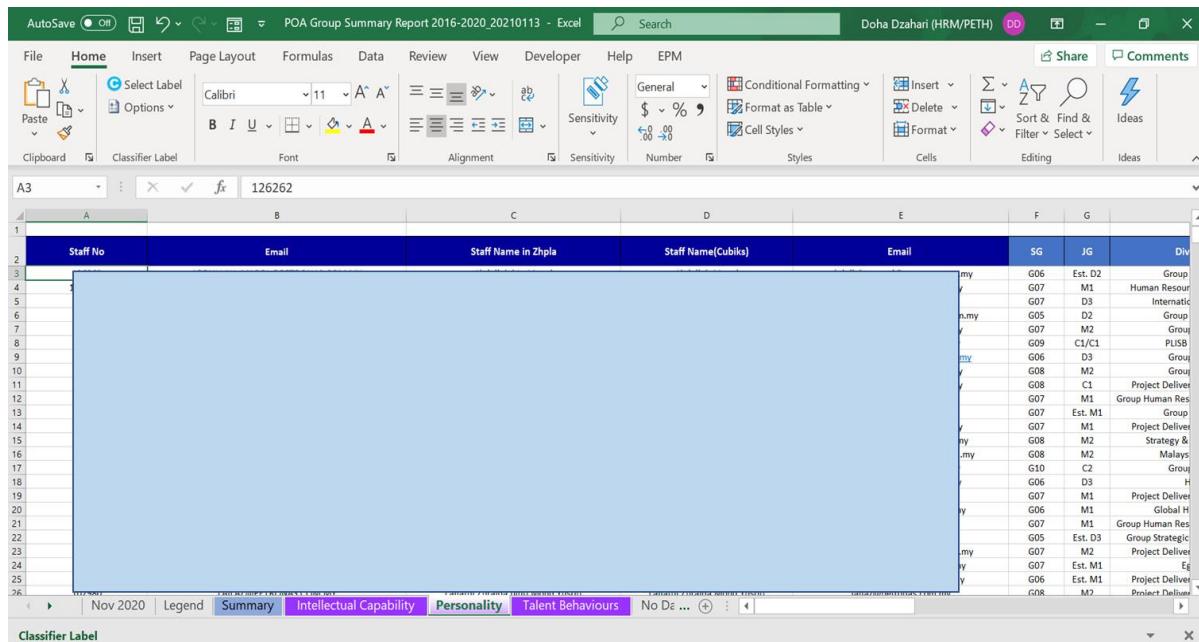


Figure 5: Manage on Personality Online Assessment database

3. Created online forms for Aunt Sima Project and manage the database of the respondents.

Yours Sincerely,
Your Matchmakers @ Top Talent Management.

1. Can you please state your staff number?

* 2. Can you please state your PETRONAS Email address?

* 3. Can you please share your job level?

* 4. Can you please tell us you are from which Business?

Figure 6: Created online forms to gather survey through Survey Monkey

X	Y	Z
Please state the size of the overall team that the talent needs to manage?	Where will this position be located at?	Please let us know the Educational Background needed to perform the job? (e.g. Degree in Management Psychology, Degree in Economics, etc)
200 and above	Malaysia	(e.g. Project Management Pro
21-50	Malaysia	Degree in Engineering & Expert Level knowledge in Valuation techniques & MBA (useful)

Figure 7: Manage on the database of the survey.

4. Designed posters for TCLD (Techno-Commercial Leadership Development) circle talk.



Figure 8: Designed posters for TCLD talk using Canva.

5. Prepared Deck for Top Talent presented at PETRONAS Talent Council.

Approval of New Top Talents, 20201124.FINAL (1) - Protected View - Saved to this PC

File Home Insert Design Transitions Animations Slide Show Review View Developer Help EPM Foxit Reader PDF Share Comments

PROTECTED VIEW Be careful—files from the Internet can contain viruses. Unless you need to edit, it's safer to stay in Protected View. Enable Editing

Approval of New Top Talents

PTC 06/FY 2020

Development Centre and Development Workshop Assessment Results
(Batch : September – October 2020)

24.11.2020

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Slide 1 of 18

Figure 9: Created Petronas Talent Council deck for Approval of new Top Talent.

6. Prepared Service Order for Development Center.

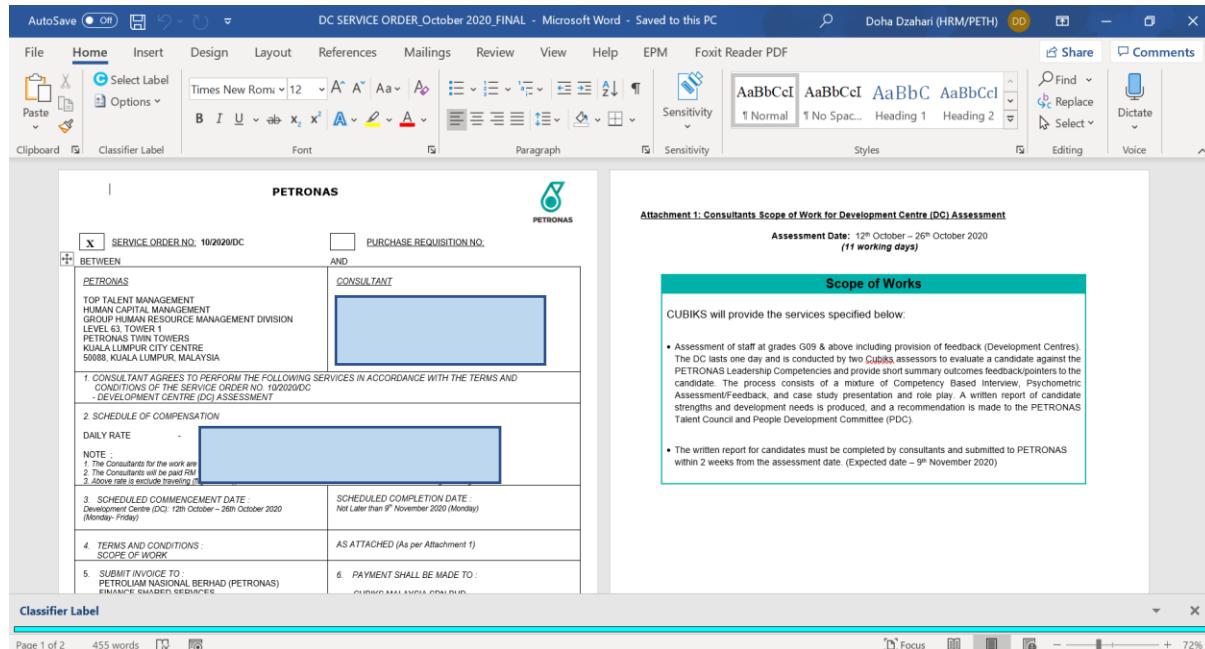


Figure 10: Prepared Service Order for Development Centre Consultants.

7. Manage on Talent Q submission.

	Staff Name	Email	Batch	Remarks	Date
1	Khai	MY	1	Completed	27/10/2020 17:20:33
2	Moh	5.COM.MY	1	Completed	27/10/2020 07:25:40
3	Mur	OM.MY	1	Completed	25/10/2020 07:53:58
4	Abg	Y	1	Incomplete	
5	Has	OM.MY	1	Completed	3/11/2020 5:55
6	Syal	Y	1	Incomplete	
7	Zub	Y	1	Completed	25/10/2020 12:47:30
8	Adia	Y	1	Completed	
9	Ahn	4.MY	1	Incomplete	21/10/2020 02:58:48
10	Azm	1	1	Incomplete	
11	Istro	1.MY	1	Completed	4/11/2020 6:14
12	Asm	MY	1	Completed	23/10/2020 00:01:50
13	Chri	OM.MY	1	Completed	25/10/2020 18:54:03
14	Moh	1.MY	1	Completed	26/10/2020 04:55:14
15	Nen	MY	1	Completed	4/11/2020 1:41
16	Ami	1	1	Completed	25/10/2020 15:34:11
17	Nari	4.Y	1	Incomplete	
18	Mof	1.MY	1	Completed	25/10/2020 09:12:26
19	Juh	1.COM.MY	1	Completed	26/10/2020 07:56:17

Batch 1 Batch 2 Batch 3 Batch 4

Figure 11: Verified on the submission status of the Talent Q.

8. Verified on the leader's schedule for their upskilling session

Figure 12: Verified on the leaders' schedule for their Upskilling session.

Practicum Problem

The problem that encountered during the industrial training is in term of the enhanced database development aspects. Most of the time, I need to focus on database enhancement and at the same time need finished all the task given in the organization by supervisor. Therefore, students need to be wise in dividing time and balancing the both tasks in order to complete them within a time given. Next problem is the working from home environment as I did not get the experience of working in the physical office within the internship period. I somehow missed a lot of opportunity of what I can improve on such as my communication skills and my confidence to meet other people. Plus, sometimes some work cannot be done by me because of limited access to the company website as it contains private and confidential matter. However, to overcome this problem, I always refer my supervisors to inquire about any unknown matters and make notes through observations of the tasks being performed.

Practicum Effectiveness

Industrial training helps me to gain experience with the real working environment. I manage to adapt with the working environment by approaching with different people. Besides, I can improve my communication skills, time management and task solving in a specific time. Moreover, it helps me to work under pressure and keep myself calm down and come out with solution. This is an opportunity for me feel motivated and wish to learn and explore new thing during the internship. I am also glad that practicum have thought me to become more matured while making decisions.

Practicum Objectives Achievement

The main objective of practicum for the students is to get experiences, enhance new things and be familiar with real working environment. Industrial training also gives me a lot of opportunity to enhance something that I did not studied in the university and do let me feel the situation in the organization. Besides that, I have explored new skills that taught me on how to have good communication skill, punctuality, teamwork, confidence and present myself in different environment. Other than that, I have been able to enhance the database for the organization and have an opportunity to do multi-tasking.

Learning Outcome during Practicum

There are several learning outcomes that I get during the industrial training are:

- a) I have learnt to communicate fluently with other people from in and outside the organization.
- b) I have learnt on how to work under pressure and manage things accordingly.
- c) I have learnt on how to do works properly.
- d) I have learnt to start a conversation while admitting leaders in a meeting.
- e) I have learnt how to support a team.

Recommendation and Suggestion

Through the internship, we should apply all that we study in university. Thus, I would like to suggest university to provide as much experience on handling program and workshop to student. This is because one of the skills that needed is soft skill for work in real organizational. This might help student to expose all the soft skill and ease all program when come to internship. Moreover, this can practice students to work in teams and adapt the strengths and weaknesses with other team members through good communication skills. Interpersonal skill such as teamwork and communication skills are very important when students come into a real work situation in future.

APPENDIX B

TCLD Database

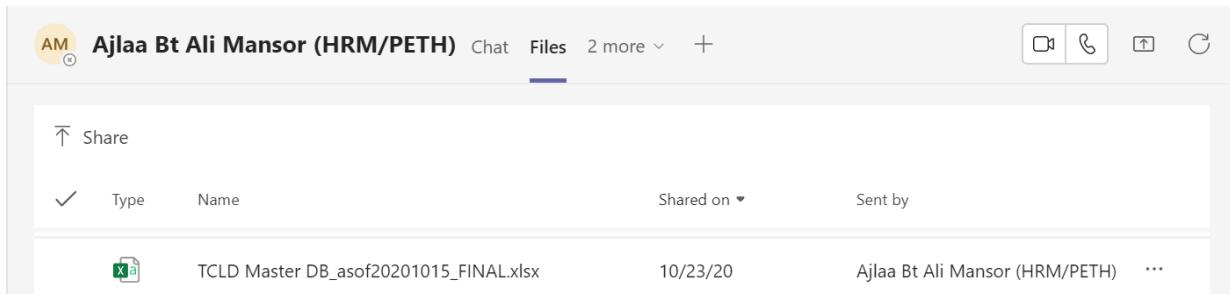


Figure 13: TCLD database been handed to the developer

Gantt Chart

The Gantt chart shows in Table 1.0 where the project begins from October 2020 until the end of April 2021 as follows:

Table 1.0: Gantt Chart of the project

ACTIVITY	OCTOBE R	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL
Topic Selection							
Preparing Proposal							
Upgrading Database							
Testing and Review							
Implementation							
WEEK	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24				

Entity Relationship Diagram

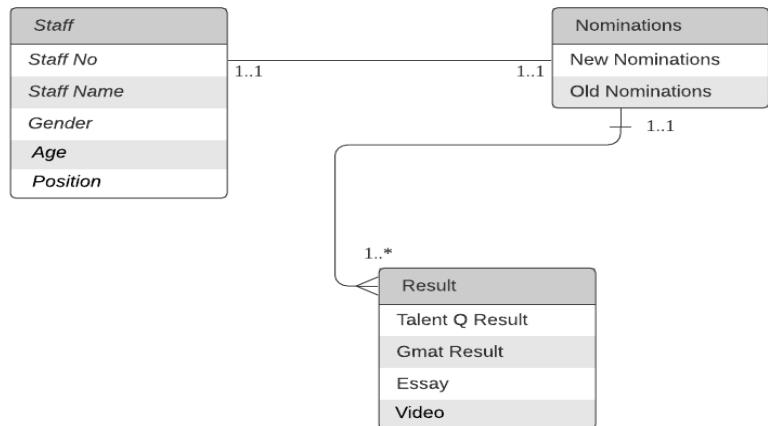


Figure 14: Entity Relationship Diagram for TCLD Database

APPENDIX C

Figure 15 to figure 18 shows the virtual meeting and discussion during my internship period.

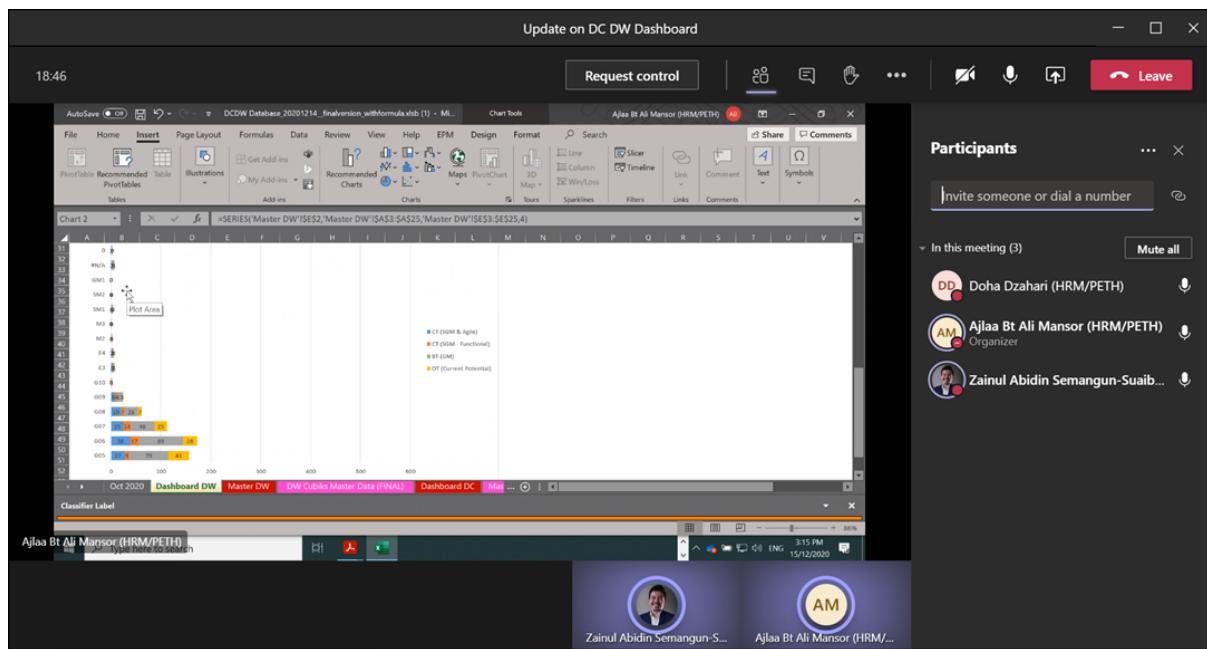


Figure 15: Online discussion for DCDW database

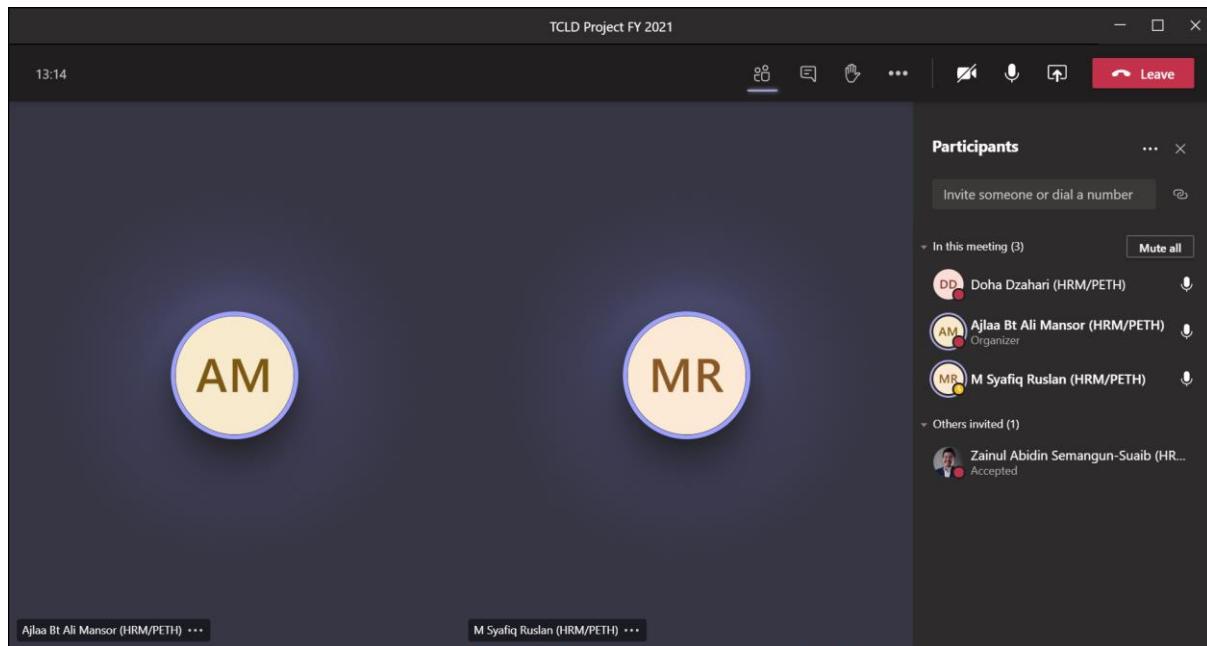


Figure 16: Online discussion for TCLD project

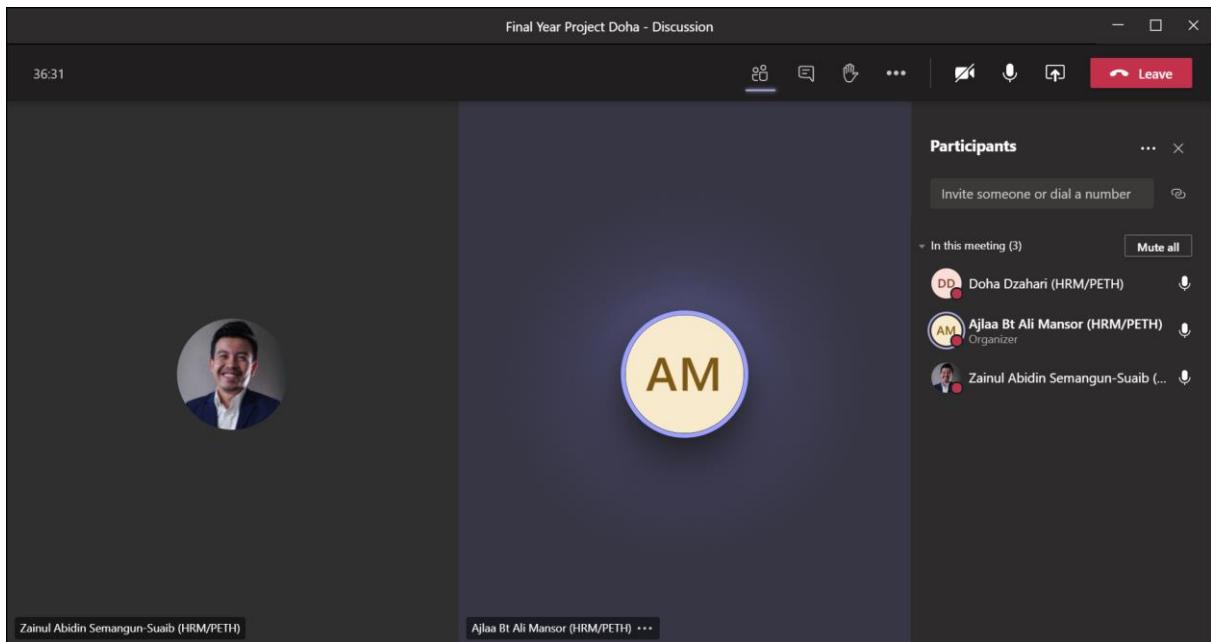


Figure 17: Online discussion for my Final Year Project



Figure 18: Admitting the candidate and the consultant in the virtual DC Assessment.